



**CITY COUNCIL
COMMUNICATION:**

ITEM _____

**OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA**

00-210

SYNOPSIS -

AGENDA:

MAY 1, 2000

Communication requesting procurement of a "Machinery Analyzer" (\$13,499) along with a three-year maintenance agreement (\$3,650), in the amount of \$17,149 to Computational Systems, Inc, 835 Innovation Drive, Knoxville Tennessee (Nancy James, Sales Representative).

SUBJECT:

REQUEST FOR
PROCUREMENT OF
MACHINERY
ANALYZER

FISCAL IMPACT -

Funding for this procurement is budgeted in Fund EN251, Organization ENG070113, Subobject Code 544010, amount \$17,149.

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

RECOMMENDATION -

Approval.

SUBMITTED BY:

WILLIAM STOWE
WRF MANAGER,
PUBLIC WORKS
DIRECTOR
DESIGNEE

BACKGROUND -

The Des Moines Metropolitan Wastewater Reclamation Facility implemented a predictive maintenance program in 1998. This program consists of two major functions, vibration monitoring and thermograph monitoring, generally known as "equipment condition monitoring". This program focuses on the major and most critical equipment within the facility where the best return on investment is achieved. It is based on the theories of data trending and analysis of those trends in order to predict when a piece of equipment will have a failure. Staff can then plan the repair of that piece of equipment prior to failure, thereby reducing downtime and repair costs.

In December of 1999, the facility learned that the machinery analyzer used to collect the vibration data on the equipment was not Y2K compliant. Staff drafted specifications and

requested the purchasing agent to seek competitive bids. Bid No. G2000-219 was let and eight bids were sent out, but only one bid was received. During the bidding process it was discovered that the historical data stored on the computer would not be capable of transfer to another vendors software program due to the proprietary nature of the existing software. Therefore, only one vendor responded to the specifications.

Staff's analysis of the situation leads them to determine that it would be most cost-effective for the facility to maintain the historical data, thereby assuring accurate data trends and analysis. With this determination having been made, staff must recommend awarding the bid to Computational Systems Inc, in the amount of \$17,149 for one machinery analyzer (\$13,499), along with a three-year maintenance agreement (\$3,650) which includes: software upgrades, labor for repairs to the analyzer, and to provide a "loaner" at no extra cost should the analyzer need repair.